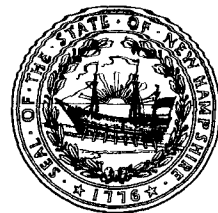




N/C
NHDES 902 *ew*

The State of New Hampshire

Department of Environmental Services



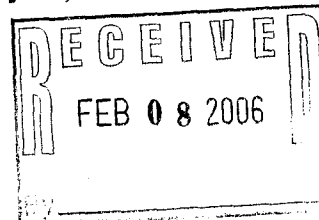
Michael P. Nolin
Commissioner

Mr. Richard Kalin
P.O. 516
Hollis, NH 03049

Re: Hayden Mill Pond
Dam #119.09

**ADMINISTRATIVE ORDER
No. WD 06-005**

January 17, 2006



6004743

2006 JAN 23 AM 11:24

A. INTRODUCTION

This Administrative Order is issued by the Department of Environmental Services, Water Division to the Mr. Richard Kalin, pursuant to RSA 482:12 and RSA 482:87. This order is effective immediately upon issuance.

B. PARTIES

1. The Department of Environmental Services, Water Division ("DES"), is a duly constituted administrative agency of the State of New Hampshire, having its principal office at 29 Hazen Drive, Concord, New Hampshire.
2. Mr. Richard Kalin is an individual having a mailing address of P.O. Box 516, Hollis, New Hampshire 03049.

C. STATEMENTS OF FACTS AND LAW

1. Pursuant to RSA 482, DES regulates the construction and maintenance of dams so as to meet the stated statutory objectives, including the regulation of water levels, the lessening of flood damage, and the enhancement of public safety. Pursuant to RSA 482:87, the Commissioner of DES has adopted NH Admin. Rules Env-Wr 100-700 to implement this program.
2. According to DES records, Mr. Richard Kalin owns the dam in Hollis, New Hampshire known as the Hayden Mill Pond Dam, further identified as Dam #119.09 (the "Dam"). The Dam is located approximately 0.6 mile upstream of the secondary state highway, NH Route 122.
3. RSA 482:12 requires DES to periodically inspect all dams in the state which may pose a menace to public safety, and to take action to ensure that the dam is repaired if the inspection indicates that the public safety so requires.
4. RSA 482:2, V defines a "dam in disrepair" as a dam which is a menace to public safety and is incapable of safely impounding flood waters to its crest, or is incapable of maintaining a reasonably constant level of waters impounded or which does not contain adequate gates and sluiceways to provide for the holding or controlled discharge of waters impounded.

BK 7618PG2226

P.O. Box 95, 29 Hazen Drive, Concord, New Hampshire 03302-0095

Telephone: (603) 271-3503 • Fax: (603) 271-2867 • TDD Access: Relay NH 1-800-735-2964

DES Web site: www.des.nh.gov

5. RSA 482:11-a requires the owner of a dam to maintain and repair the dam so that it does not become a dam in disrepair.

6. Env-Wr 101.25 defines "menace to public safety" as any dam, the failure of which would threaten life or property. Property, when used in this context, means buildings, structures or other real estate.

7. Env-Wr 101.08 defines "Class B Structure" as a dam with a significant hazard potential, the failure of which would result in structural damage to a secondary state highway as well as major economic loss to residential structures.

8. The Dam has been classified as a Class B Structure by DES because its failure would result damage to the downstream secondary state highway, NH Route 122 as well as cause major economic loss to residential structures.

9. On December 21, 2001, an inspection of the Dam was conducted in accordance with RSA 482:12 and Env-Wr 302.02 and the following deficiencies were noted:

- There are trees located on the crest of the right embankment;
- There is cracked concrete on the upstream face of the dam to the right of the spillway;
- The overall condition of the concrete spillway is poor. There is spalled concrete on the right spillway channel wall, the downstream face of the spillway has severe concrete erosion on the right side at the contact with the right wall, and the spillway center buttress wall has severe erosion on the left side approximately 1 foot above the apron;
- There are missing stones and soil erosion at the downstream end of the right spillway training wall at the contact of the concrete and stone wall;
- There are several tree branches overhanging the spillway discharge area, that are close to reaching the concrete channel floor;
- The downstream stone wall of the dam is severely leaning;
- The historical seepage under the stone at the toe of the dam is flowing at approximately 10 gallons per minute(gpm);
- There is seepage through the stones located to the left of the low level outlet;

- There are missing stones and soil erosion downstream from the low level outlet on the right side stone training wall;
- There is a wet area/possible boil located approximately 50 feet from the downstream toe. The flow was clear and estimated at 2 gpm;
- The operations and maintenance plan needs to be updated; and
- The Emergency Action Plan (EAP) has not been updated or tested.

10. On June 27, 2002, DES sent a Letter of Deficiency (LOD) to Mr. Kalin requesting that the deficiencies be corrected by September 1, 2002:

11. By September 10, 2002, Mr. Kalin had partially complied with the LOD. The trees had been removed, monitoring of the leaning wall had begun and the EAP had been updated and tested.

12. On June 10, 2005, another inspection was conducted in response to a report that a section of the dam had failed. It was found that a 30' long by 7' wide section of the dam crest along the downstream face had fallen down hill. The exposed crest section was dry and approximately 23 feet of the crest width of the dam remained intact. Adjacent sections of the wall appeared unstable and in danger of failing. There were several sinkholes in the crest of the dam adjacent to both the upstream and downstream masonry walls.

13. On August 2, 2005 DES sent another Letter of Deficiency (LOD) to Mr. Kalin requesting that the deficiencies noted during both inspections be corrected according to the schedule set out in the LOD.

14. A follow-up inspection was conducted on November 2, 2005 to check on the outstanding LOD items. Mr. Kalin was met at the site. Mr. Kalin had failed to complete the items requested by September 1, 2005 and additional deficiencies were noted. Additional deficiencies included further unraveling of the downstream masonry face of the dam.

15. On November 16, 2005, the DES sent a letter to Mr. Kalin requesting voluntary drawdown of the impoundment.

16. The Dam is in disrepair as defined in RSA 482:2 V.

17. The Dam in its current state of disrepair is a menace to public safety, as a failure of the dam would damage the downstream secondary state highway, NH Route 122 as well as cause major economic loss to residential structures.

D. DETERMINATION OF VIOLATIONS

1. The Owner has violated RSA 482:11-a by failing to maintain the Dam to prevent it from becoming a "dam in disrepair".

E. ORDER

Based on the above findings, DES hereby orders Mr. Kalin as follows:

1. **Within 3 days from receipt of this Order**, drawdown the impoundment. This drained condition will remain until such time as compliance with items E.2 through E.7 (Dam reconstruction) **OR** E.8 and E.9 (Dam removal) of this Order have been achieved.

If Mr. Kalin elects to repair the Dam pursuant to Item E.1, then he must address Item E.2 through E.7, below:

By March 1, 2006

2. Retain the services of a Professional Engineer, licensed in the State of New Hampshire, to perform an investigation and stability analysis related to the stability of the entire length of the downstream stone face of the dam to address the information in item E.5 below.
3. Update the O&M plan. The plan should describe the control of impoundment levels, monitoring/maintenance procedures, and identify emergency contact personnel. In addition, the plan should include information on the method and frequency of the monitoring of the leaning downstream stone face. Measurements taken to date should be submitted to the DES for review.
4. Update and test the EAP.

By September 1, 2006

5. Submit to DES an engineering report as completed by a New Hampshire Licensed Professional Engineer generated as part of item E2, above, and include a plan and schedule for repairs to the failed section of the downstream masonry wall, as well as for any sections of the embankment that are found to have inadequate factors of safety. Include a schedule to address concrete repairs in the following locations:
 - a. Repair the cracked gunite resurfacing on the upstream right concrete retaining wall, to the right of the spillway, and the deterioration and cracking of the concrete on the abutment walls and bottom slab of the spillway;
 - b. Repair the concrete spillway, specifically the spalled concrete on the right hand side training wall, the downstream face of the spillway at the contact with the

right training wall, and the spillway center buttress on the left side approximately 1 foot above the apron;

6. **By December 1, 2006** Submit design plans, specifications, and any required DES permit applications for the reconstruction of the Dam to meet current DES standards for an existing Class B dam and to correct all deficiencies listed in Item C.9 of this order.
7. **By December 1, 2007** Complete the reconstruction of the Dam in accordance with the approved plans, specifications, and permit conditions.

If the Owner elects to remove the Dam pursuant to Item E.1, then the Owner must address Item E.8 and E.9, below:

8. **By September 1, 2006** Submit design plans, specifications and any required DES permit applications for the removal of the Dam.
9. **By December 1, 2007** Remove the Dam in accordance with the approved plans, specifications, and permit conditions.

Send correspondence, data, reports, and other submissions made in connection with this Administrative Order, **other than appeals**, to DES as follows:

Grace Levergood, P.E., Dam Safety Engineer, Dam Bureau
DES Water Division
29 Hazen Drive
Concord, NH 03301
Fax: (603) 271-7894
E-mail: glevergood@des.state.nh.us

F. APPEAL

Any person aggrieved by this Order may appeal the Order to the Water Council by filing an appeal that meets the requirements specified in Env-Wc 200 within 30 days of the date of this Order. Copies of the rule are available from the DES Public Information Center at (603) 271-2975 or at <http://www.des.state.nh.us/desadmin.htm>. Appealing the Order does not automatically relieve Mr. Kalin of the obligation to comply with the Order.

G. OTHER PROVISIONS

Please note that RSA 482:89 provides for administrative fines and criminal penalties for the violations noted in this Order. DES will continue to monitor Mr. Kalin's compliance with applicable requirements and will take appropriate action if additional violations are discovered.

This Order is being recorded in the Hillsborough County Registry of Deeds so as to run with the land.



COPY

Harry T. Stewart, P.E., Director
Water Division



COPY

Michael P. Nolin, Commissioner
Department of Environmental Services

Certified Mail/RRR: 7000 1670 0000 0588 6660

cc: Gretchen Hamel, DES Legal Unit Administrator
Public Information Officer, DES PIP Office
NH AGO